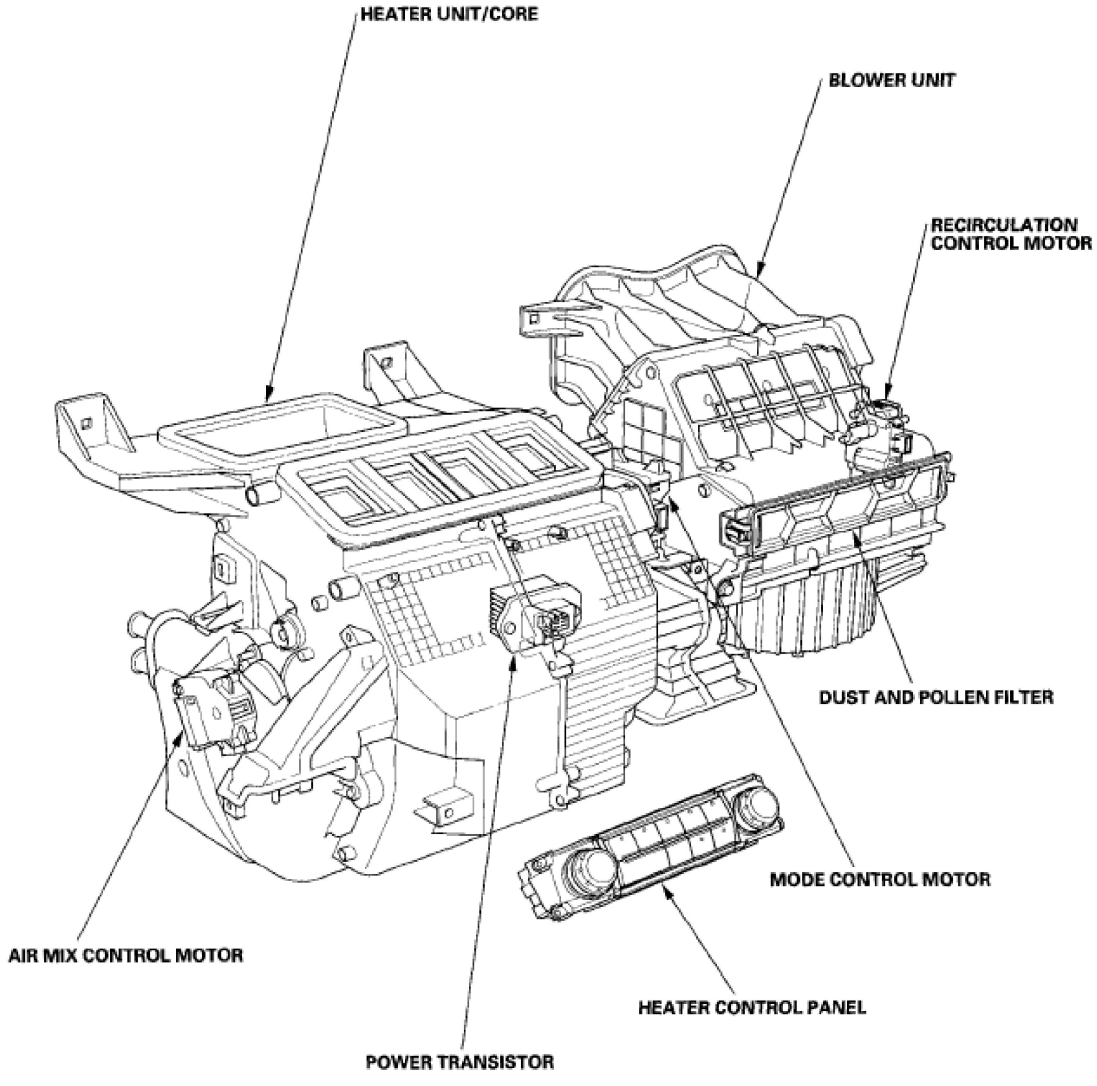
2006-08 HVAC

Heating - Civic (All Except Hybrid)

COMPONENT LOCATION INDEX



4-door is shown, 2-door is similar.

Fig. 1: Identifying Heating Component Location
Courtesy of AMERICAN HONDA MOTOR CO., INC.

GENERAL TROUBLESHOOTING INFORMATION

HOW TO USE THE SELF-DIAGNOSTIC FUNCTION

The heater control panel has a self-diagnostic function for heating and ventilation system. To run the self-diagnostic function, do the following:

1. Turn the ignition switch to LOCK (0).
2. Press and hold the recirculation control and rear window defogger buttons, and turn the ignition switch ON (II).
3. Recirculation indicator turns on for 2 seconds, then self-diagnostic function begins.

NOTE:

- **The blower motor will run at any speed regardless of the dial positioning.**
- **In the case of multiple problems, the recirculation indicator will blink the lowest number DTC only.**
- **If no DTCs are found, the indicator will not blink.**

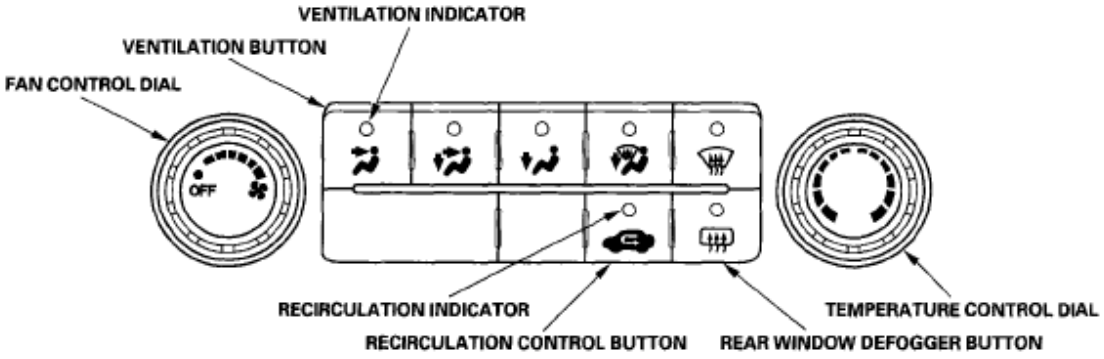


Fig. 2: Identifying Recirculation Control Button, Recirculation/Ventilation Indicator
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Example of DTC Indication Pattern (DTC 3)

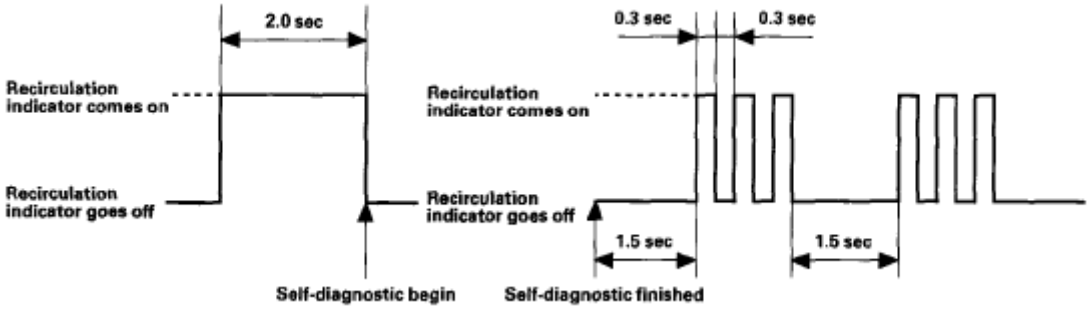


Fig. 3: Identifying DTC Indication Pattern (DTC 3)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DETECTION ITEM REFERENCE

DTC (Recirculation Indicator Blinks)	Detection Item
1	An open in the air mix control motor circuit (see **DTC INDICATOR 1: AN OPEN IN THE AIR MIX CONTROL MOTOR CIRCUIT**)
2	A short in the air mix control motor circuit (see **DTC INDICATOR 2: A SHORT IN THE AIR MIX CONTROL MOTOR CIRCUIT**)
3	A problem in the air mix control linkage, door, or motor (see **DTC INDICATOR 3: A PROBLEM IN THE AIR MIX CONTROL LINKAGE, DOOR, OR MOTOR**)
4	An open or short in the mode control motor circuit (see **DTC INDICATOR 4: AN OPEN OR SHORT IN THE MODE CONTROL MOTOR CIRCUIT**)
5	A problem in the mode control linkage, doors, or motor (see **DTC INDICATOR 5: A PROBLEM IN THE MODE CONTROL LINKAGE, DOORS, OR MOTOR**)
6	A problem in the blower motor circuit (see **DTC INDICATOR 6: A PROBLEM IN THE BLOWER MOTOR CIRCUIT**)
	Heater control panel internal error (see **DTC**

7	**INDICATOR 7: HEATER CONTROL PANEL INTERNAL ERROR**)

Clear the DTCs

When the problem is repaired, DTCs will automatically clear.

SYMPTOM TROUBLESHOOTING INDEX

SYMPTOM TROUBLESHOOTING INDEX

Symptom	Diagnostic procedure	Also check for
Recirculation control doors do not change between Fresh and Recirculate	**RECIRCULATION CONTROL MOTOR CIRCUIT TROUBLESHOOTING**	• HVAC DTCs (see **GENERAL TROUBLESHOOTING INFORMATION**) • Blown fuse No. 36 (10 A) in the under-dash fuse/relay box • Cleanliness and tightness of all terminals
Blower and heater controls do not work	**HEATER CONTROL POWER AND GROUND CIRCUIT TROUBLESHOOTING**	• HVAC DTCs (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION**) • Blown fuse No. 36 (10 A) in the under-dash fuse/relay box • Poor ground at G504 (see **CONNECTOR TO HARNESS INDEX**) • Cleanliness and tightness of all terminals
Infufficient heating	1. Check the coolant level (see **COOLANT**	Damaged cylinder head gasket

	CHECK) 2. Check the radiator cap (see **RADIATOR CAP TEST**) 3. Check the coolant temperature 4. Check the operation of the air mix control motor and door (see **Air Mix Control Motor Test**) 5. Check the blower motor for obstructions 6. Check for air leaks around the ducts and vents 7. Check the inlet heater hose temperature • If it is COLD, check for restrictions in the hose, a damaged or leaking thermostat, and a damaged or leaking water pump. • If it is HOT, check for restrictions in the heater core. Back flush the heater core or replace heater core.	

SYSTEM DESCRIPTION

HEATING DOOR POSITIONS

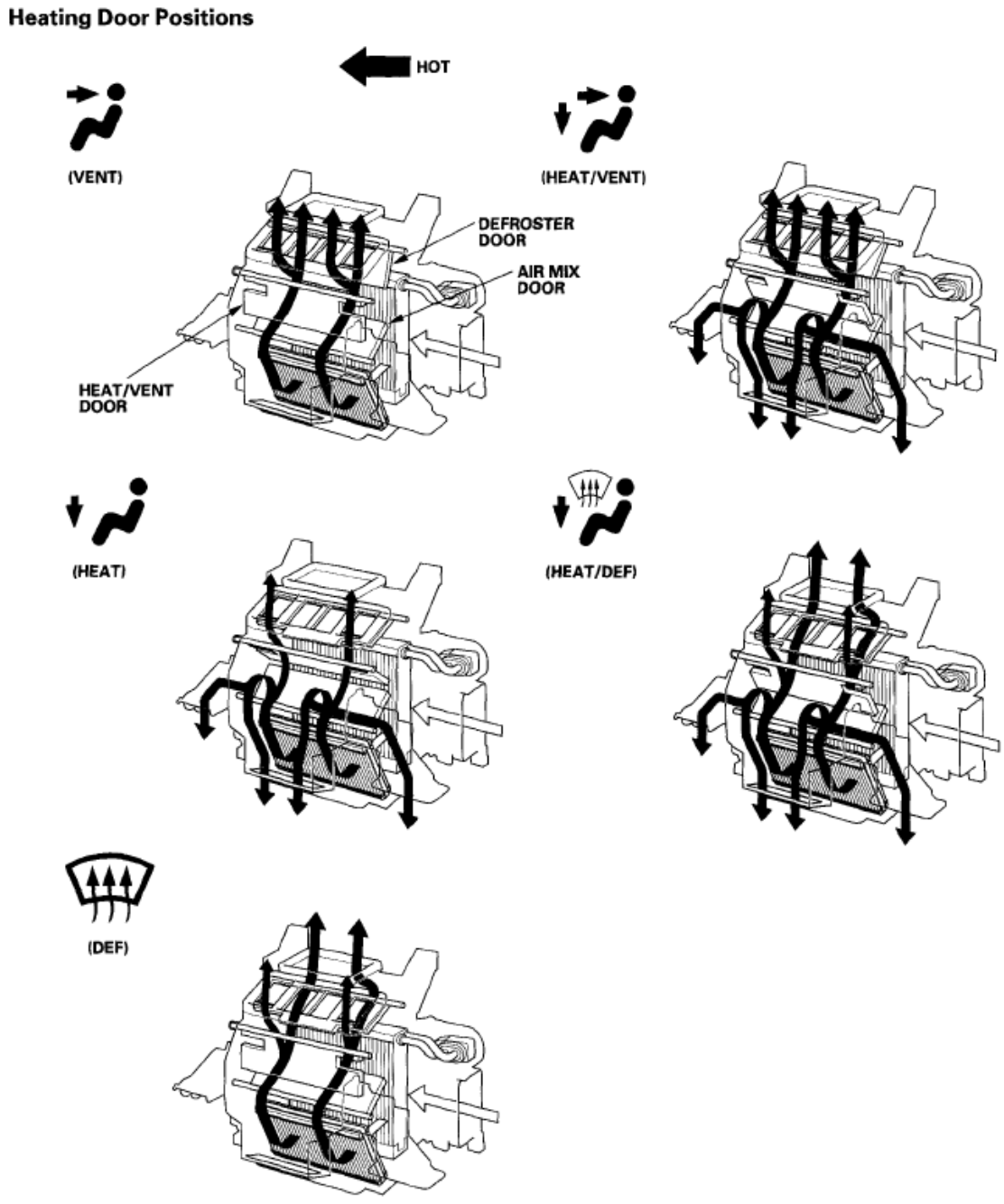


Fig. 4: Identifying Heating Door Positions
Courtesy of AMERICAN HONDA MOTOR CO., INC.

HEATER CONTROL PANEL INPUTS AND OUTPUTS

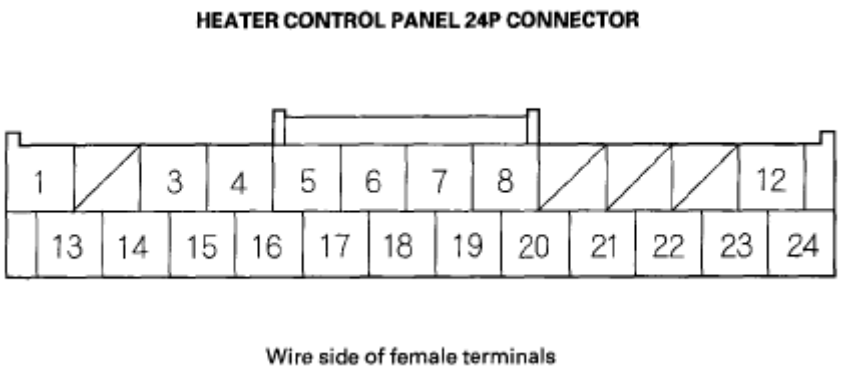


Fig. 5: Identifying Heater Control Panel 24P Connectors
Courtesy of AMERICAN HONDA MOTOR CO., INC.

WIRE COLOR AND SIGNALS REFERENCE

Cavity	Wire color	Signal	
1	BLK	AIR MIX POTENTIAL +5V	OUTPUT
2	-	-	-
3	ORN	MODE 1	OUTPUT
4	LT GRN	MODE 2	OUTPUT
5	PUR	MODE 3	OUTPUT
6	BLU	MODE 4	OUTPUT
7	BLU	BLOWER FEEDBACK	INPUT
8	YEL	POWER TRANSISTOR CONTROL	OUTPUT
9	-	-	-
10	-	-	-
11	-	-	-
12	RED	ILLUMI (-)	OUTPUT
13	RED	SENSOR COMMON GROUND	INPUT
14	WHT	MODE VENT	OUTPUT
15	GRN	MODE DEF	OUTPUT
16	ORN	RECIRCULATE	INPUT
17	PUR	FRESH	INPUT
18	GRY	AIR MIX POTENTIAL	OUTPUT
19	LT BLU	AIR MIX COOL	OUTPUT
20	PNK	AIR MIX HOT	OUTPUT

21	BLK	GROUND (G504)	OUTPUT
22	BRN	REAR WINDOW DEFOGGER RELAY	INPUT
23	LTGRN	IG2 (Power)	INPUT
24	GRY	ILLUMI (+)	INPUT

CIRCUIT DIAGRAM

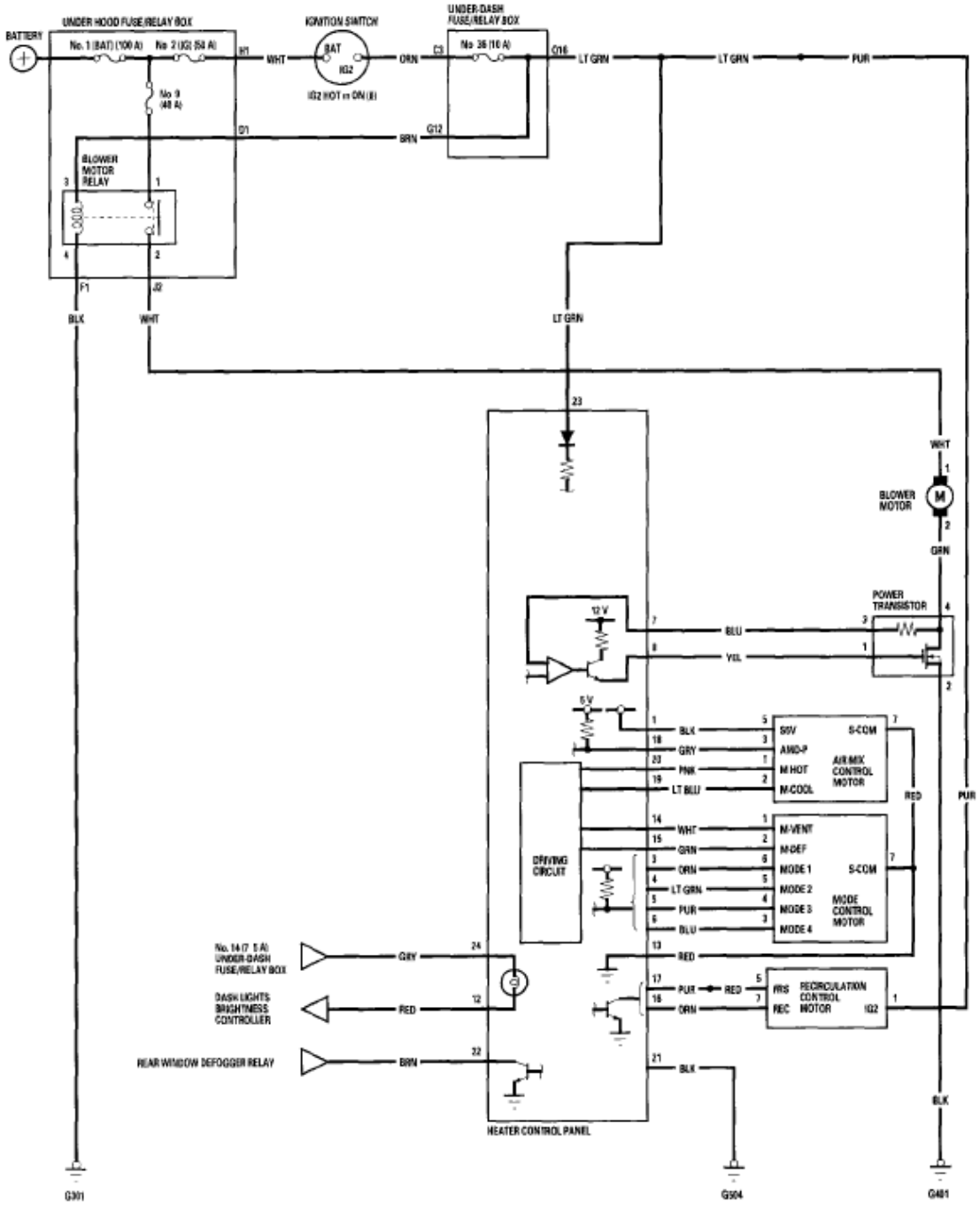


Fig. 6: Heater Control Panel - Circuit Diagram
Courtesy of AMERICAN HONDA MOTOR CO., INC.

DTC TROUBLESHOOTING

DTC INDICATOR 1: AN OPEN IN THE AIR MIX CONTROL MOTOR CIRCUIT

1. Clear the DTC (see **CLEAR THE DTCS**).
2. Turn the ignition switch to LOCK (0), and then ON (II).
3. Do the self-diagnostic with the heater control panel (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION**).
4. Check for DTCs.

   Is DTC 1 indicated?

   YES -Go to step 5.

   NO -Intermittent failure, check for loose wires or poor connections on the air mix control motor circuit.

5. Turn the ignition switch to LOCK (0).
6. Test the air mix control motor (see **AIR MIX CONTROL MOTOR TEST**).

   Is the air mix control motor OK?

   YES -Go to step 7.

   NO -Replace the air mix control motor (see **AIR MIX CONTROL MOTOR TEST**).

7. Disconnect the air mix control motor 7P connector.
8. Disconnect the heater control panel 24P connector.
9. Check for continuity between the following terminals of the heater control panel 24P connector and the air mix control motor 7P connector.

CONTINUITY CHECK INDEX

24P	7P
1	5
13	7
18	3

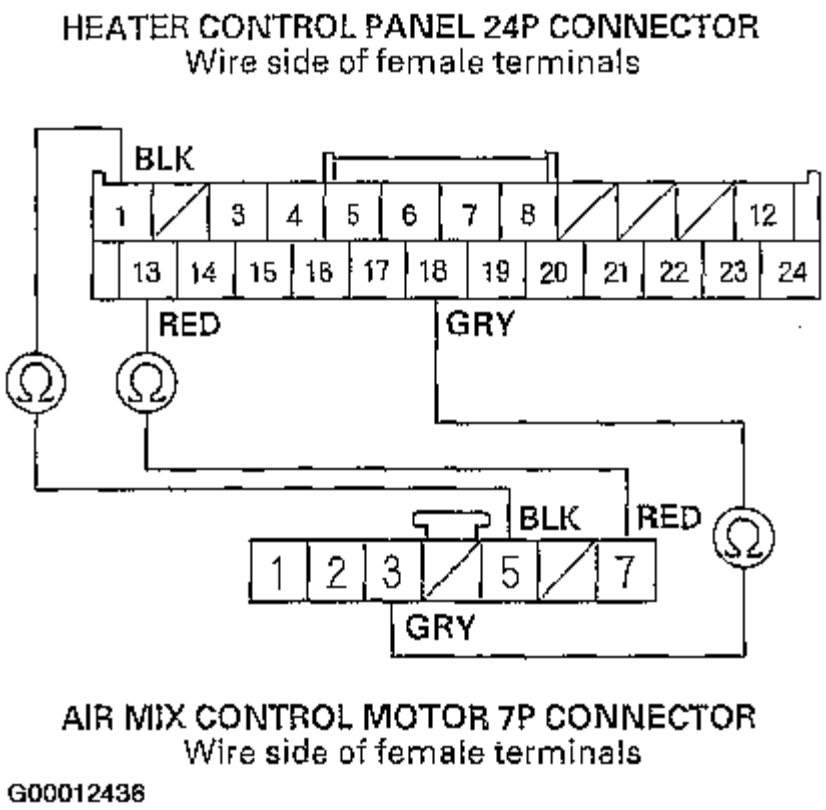


Fig. 7: Check Continuity Between Heater Control Panel Connector & Air Mix Control Motor Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Check for loose wires or poor connections at the heater control panel 24P connector and at the air mix control motor 7P connector. If the connections are good, substitute a known-good heater control panel and recheck. If the symptom/indication goes away, replace the original heater control panel.

NO -Repair any open in the wires between the heater control panel and the air mix control motor.

DTC INDICATOR 2: A SHORT IN THE AIR MIX CONTROL MOTOR CIRCUIT

1. Clear the DTC (see **CLEAR THE DTCS**).
2. Turn the ignition switch to LOCK (0), and then ON (II).

3. Do the self-diagnostic with the heater control panel (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION**).
4. Check for DTCs.

   Is DTC 2 indicated?

   YES -Go to step 5.

   NO -Intermittent failure.

5. Turn the ignition switch to LOCK (0).
6. Test the air mix control motor (see **AIR MIX CONTROL MOTOR TEST**).

   Is the air mix control motor OK?

   YES -Go to step 7.

   NO -Replace the air mix control motor (see **AIR MIX CONTROL MOTOR TEST**).

7. Disconnect the air mix control motor 7P connector.
8. Disconnect the heater control panel 24P connector.
9. Check for continuity between body ground and the heater control panel 24P connector terminals No. 1, 13 and 18 individually.

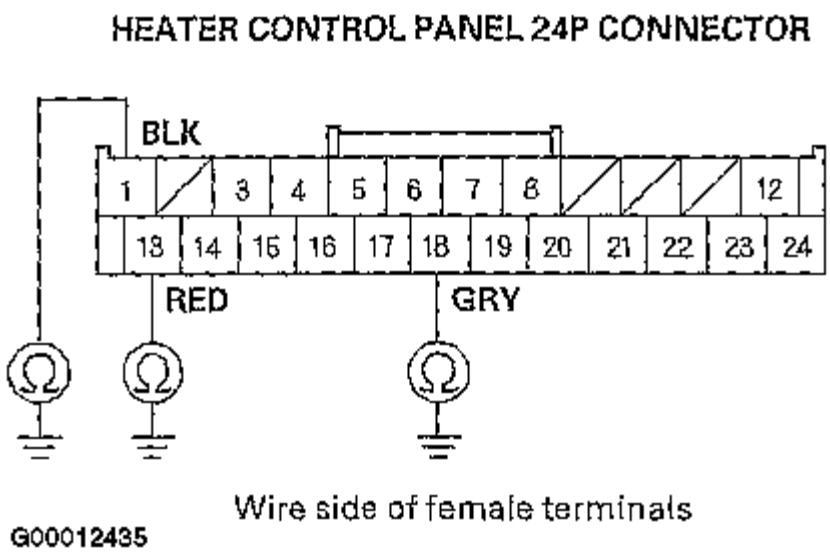


Fig. 8: Checking Continuity Between Ground & Heater Control Panel Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Repair any short to body ground in the wires between the heater control panel and the air mix control motor.

NO -Go to step 10.

10. Check for continuity between the heater control panel 24P connector terminals as follows.

TERMINALS REFERENCE

From terminal	To terminals
1	13,18
13	18

Is there continuity between any of the terminals?

YES -Repair the short in the wires.

NO -Go to step 11.

11. Turn the ignition switch ON (II), and check the same terminals for voltage to body ground. See **Fig. 8**.

    Is there battery voltage?

    YES -Repair any short to power in the wires between the heater control panel and the air mix control motor. This short may also damage the heater control panel. Repair the short to power before replacing the heater control panel.

    NO -Substitute a known-good heater control panel, and recheck. If the symptom/indication goes away, replace the original heater control panel.

DTC INDICATOR 3: A PROBLEM IN THE AIR MIX CONTROL LINKAGE, DOOR, OR MOTOR

1. Clear the DTC (see **CLEAR THE DTCS**).
2. Turn the ignition switch to LOCK (0), and then ON (II).
3. Do the self-diagnostic with the heater control panel (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION**).
4. Check for DTCs.

    Is DTC 3 indicated?

    YES -Go to step 5.

    NO -Intermittent failure.

5. Turn the ignition switch to LOCK (0).
6. Test the air mix control motor (see **AIR MIX CONTROL MOTOR TEST**).

    Is the air mix control motor OK?

    YES -Substitute a known-good heater control panel, and recheck. If the symptom/indication goes away, replace the original heater control panel.

    NO -Replace the air mix control motor (see **AIR MIX CONTROL MOTOR TEST**), or repair the air mix control linkage or door.

7. Disconnect the air mix control motor 7P connector.
8. Disconnect the heater control motor 24P connector.
9. Check for continuity between the following terminals of the heater control panel 24P connector and the air mix control motor 7P connector.

CONTINUITY CHECK INDEX

24P	7P
19	2
20	1

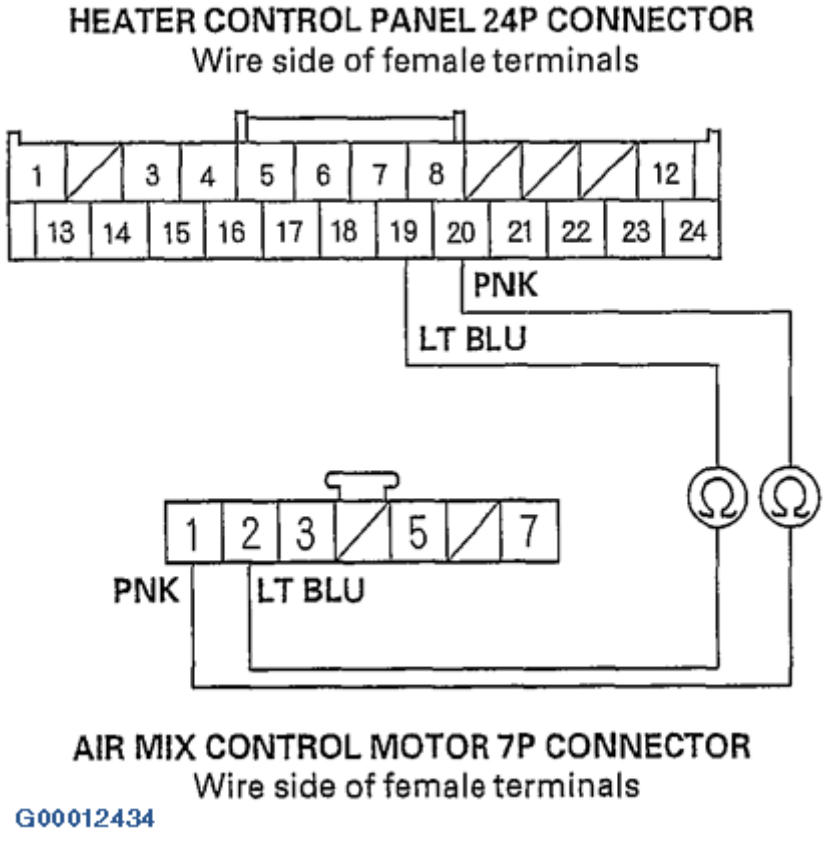


Fig. 9: Checking Continuity Between Heater Control Panel Connector & Air Mix Control Motor Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Go to step 10.

NO -Repair any open in the wires between the heater control panel and the air mix control motor.

10. Check for continuity between body ground and the heater control panel 24P connector terminals No. 19 and 20 individually.

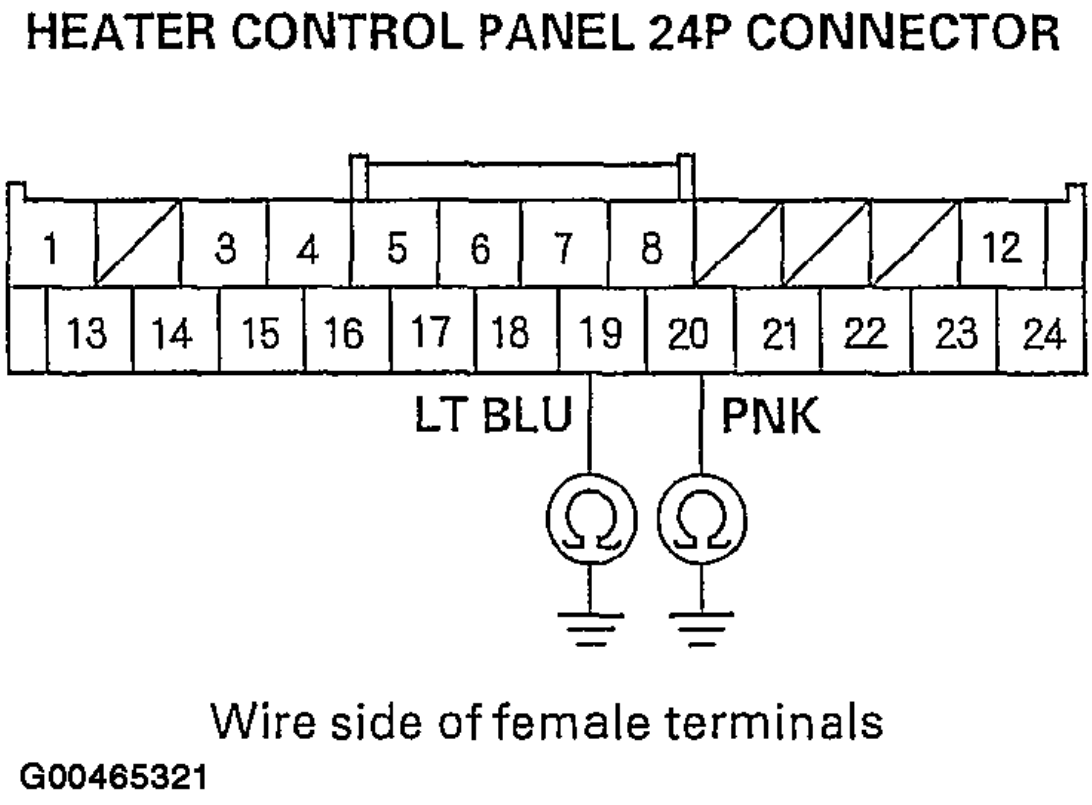


Fig. 10: Checking Continuity Between Ground & Heater Control Panel Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Repair short to body ground in the wires between the heater control panel and the air mix control motor.

NO -Substitute a known-good heater control panel, and recheck. If the

symptom/indication goes away, replace the original heater control panel.

DTC INDICATOR 4: AN OPEN OR SHORT IN THE MODE CONTROL MOTOR CIRCUIT

1. Clear the DTC (see **CLEAR THE DTCS**).
2. Turn the ignition switch to LOCK (0), and then ON (II).
3. Do the self-diagnostic with the heater control panel (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION**).
4. Check for DTCs.

   Is DTC 4 indicated?

   YES -Go to step 5.

   NO -Intermittent failure, check for loose wires or poor connections on the mode control motor circuit.

5. Turn the ignition switch to LOCK (0).
6. Test the mode control motor (see **MODE CONTROL MOTOR TEST**).

   Is the mode control motor OK?

   YES -Go to step 7.

   NO -Replace the mode control motor (see **MODE CONTROL MOTOR TEST**).

7. Disconnect the mode control motor 7P connector.
8. Disconnect the heater control panel 24P connector.
9. Check for continuity between the following terminals of the heater control panel 24P connector and the mode control motor 7P connector.

CONTINUITY CHECK INDEX

24P	7P
3	6
4	5

5	4
6	3
13	7

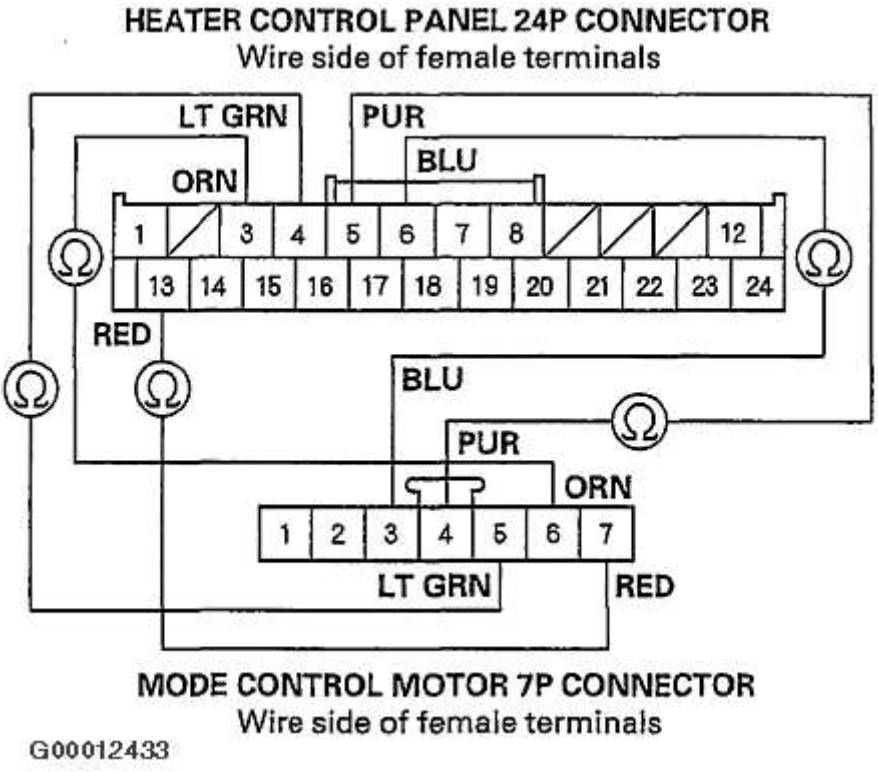


Fig. 11: Checking Continuity Between Heater Control Panel Connector & Mode Control Motor Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Go to step 10.

NO -Repair any open in the wires between the heater control panel and the mode control motor.

10. Check for continuity between body ground and the heater control panel 24P connector terminals No. 3, 4, 5, 6, and 13 individually.

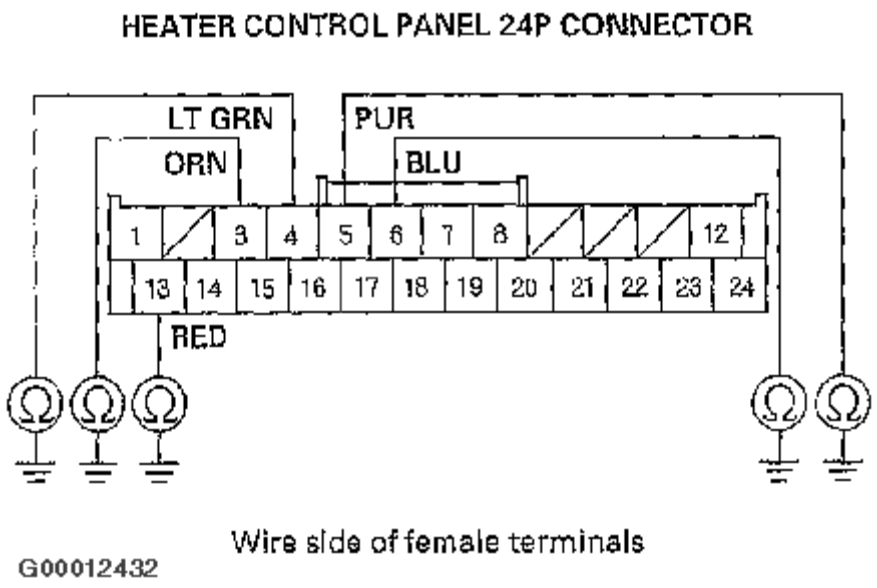


Fig. 12: Checking Continuity Between Ground & Heater Control Panel Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Repair any short to body ground in the wires between the heater control panel and the mode control motor.

NO -Go to step 11.

11. Check for continuity between the heater control panel 24P connector terminals as follows.

TERMINALS REFERENCE

From terminal	To terminals
3	4, 5, 6, 13
4	5, 6, 13
5	6, 13
6	13

Is there continuity between any of the terminals?

YES -Repair the short in the wires.

NO -Go to step 12.

12. Turn the ignition switch ON (II), and check the same terminals for voltage to body ground. See **Fig. 12**.

    Is there any voltage?

    YES -Repair any short to power in the wires between the heater control panel and the mode control motor. This short may also damage the heater control panel. Repair the short to power before replacing the heater control panel.

    NO -Check for loose wires or poor connections at the heater control panel 24P connector and at the mode control motor 7P connector. If the connections are good, substitute a known-good heater control panel, and recheck. If the symptom/indication goes away, replace the original heater control panel.

DTC INDICATOR 5: A PROBLEM IN THE MODE CONTROL LINKAGE, DOORS, OR MOTOR

1. Clear the DTC (see **CLEAR THE DTCS**).
2. Turn the ignition switch to LOCK (0), and then ON (II).
3. Do the self-diagnostic with the heater control panel (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION**).
4. Check for DTCs.

   Is DTC 5 indicated?

   YES -Go to step 5.

   NO -Intermittent failure.

5. Turn the ignition switch to LOCK (0).
6. Test the mode control motor (see **MODE CONTROL MOTOR TEST**).

   Is the mode control motor OK?

   YES -

NO -Replace the mode control motor (see **MODE CONTROL MOTOR TEST**), or repair the mode control linkage or doors.

7. Check for continuity between the following terminals of the heater control panel 24P connector and the mode control motor 7P connector.

CONTINUITY CHECK INDEX

24P	7P
14	1
15	2

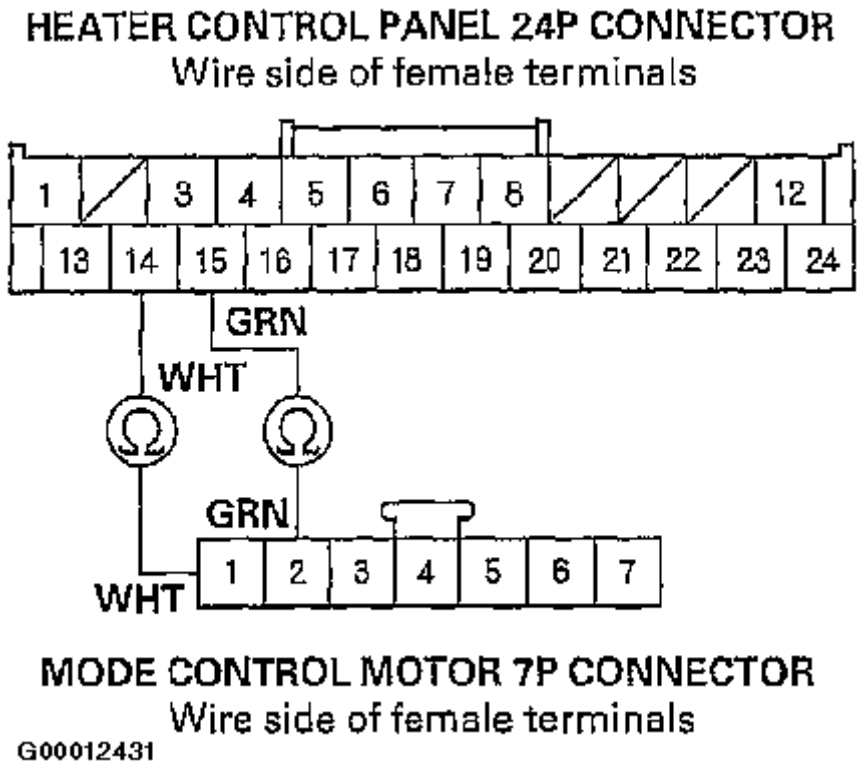


Fig. 13: Checing Continuity Between Heater Control Connector & Mode Control Motor Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Go to step 8.

NO -Repair any open in the wires between the heater control panel and the mode control motor.

8. Check for continuity between body ground and the heater control panel 24P connector terminals No. 14 and 15 individually.

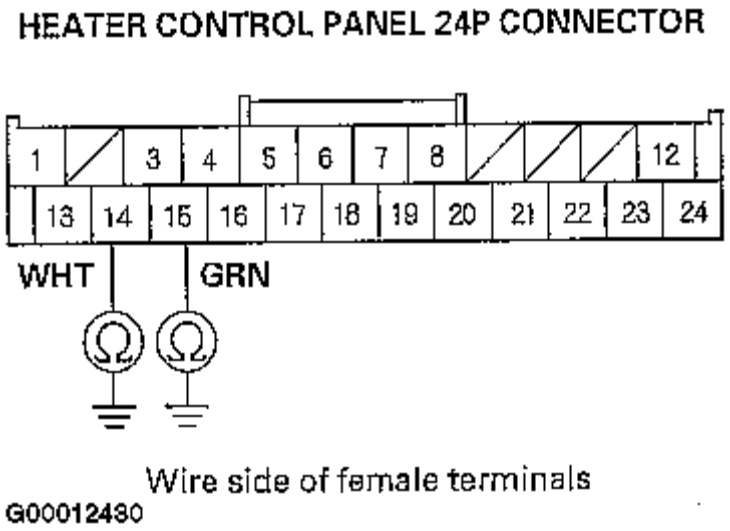


Fig. 14: Checking Continuity Between Ground & Heater Control Panel Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Repair short to body ground in the wires between the heater control panel and the mode control motor.

NO -Substitute a known-good heater control panel, and recheck. If the symptom/indication goes away, replace the original heater control panel.

DTC INDICATOR 6: A PROBLEM IN THE BLOWER MOTOR CIRCUIT

1. Clear the DTC (see **CLEAR THE DTCS**).
2. Turn the ignition switch to LOCK (0), and then ON (II).
3. Do the self-diagnostic with the heater control panel (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION**).

4. Check for DTCs.

   Is DTC 6 indicated?

   YES -Go to step 5.

   NO -Intermittent failure, check for loose wires or poor connections on the blower motor circuit.

5. Turn the ignition switch to LOCK (0).
6. Check the No. 9 (40 A) fuse in the under-hood fuse/relay box, and the No. 36 (10 A) fuse in the under-dash fuse/relay box.

   Are the fuses OK?

   YES -Go to step 7.

   NO -Replace the fuses, and recheck.

7. Connect the blower motor 2P connector terminal No. 2 to body ground with a jumper wire.

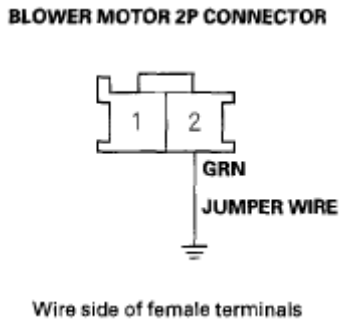


Fig. 15: Connecting Blower Motor 2P Connector Terminal No 2 To Body Ground With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

8. Turn the ignition switch ON (II).

   Does the blower motor run?

YES -Go to step 9.

NO -Go to step 25.

9. Turn the ignition switch to LOCK (0).
10. Disconnect the jumper wire.
11. Disconnect the power transistor 4P connector.
12. Check for continuity between the power transistor 4P connector terminal No. 2 and body ground.

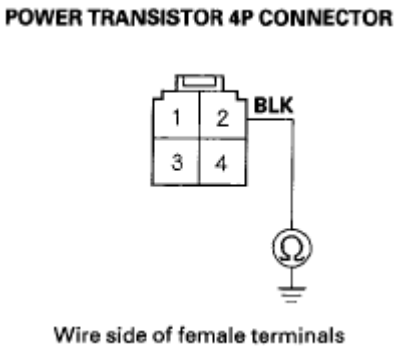


Fig. 16: Checking Continuity Between Power Transistor 4P Connector Terminal No 2 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Go to step 13.

NO -Check for an open in the wire between the power transistor and body ground. If the wire is OK, check for poor ground at G401 (see **CONNECTOR TO HARNESS INDEX**).

13. Connect the power transistor 4P connector terminals No. 2 and No. 4 with a jumper wire.

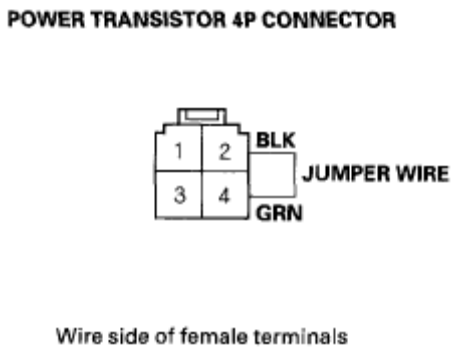


Fig. 17: Connecting Power Transistor 4P Connector Terminals No 2 And 4 With Jumper Wire
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Turn the ignition switch ON (II).

    Does the blower motor run at high speed?

    YES -Go to step 15.

    NO -Repair open in the GRN wire between the power transistor and the blower motor.

15. Turn the ignition switch to LOCK (0).
16. Disconnect the jumper wire.
17. Disconnect the heater control panel 24P connector.
18. Check for continuity between body ground and the heater control panel 24P connector terminals No. 7 and No. 8 individually.

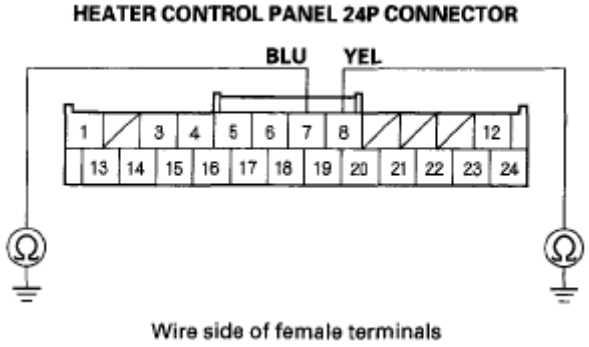


Fig. 18: Checking Continuity Between Body Ground And Heater Control

Panel 24P Terminals No 7 And 8
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Repair any short to body ground in the wires between the heater control panel and the power transistor.

NO -Go to step 19.

19. Check for continuity between the following terminals of the heater control panel 24P connector and the power transistor 4P connector.

CONTINUITY CHECK INDEX

24P	4P
7	3
8	1

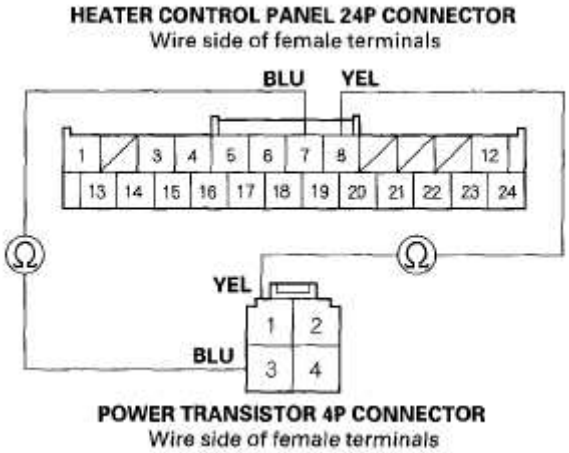


Fig. 19: Checking Continuity Between Heater Control Panel 24P And Power Transistor 4P Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Go to step 20.

NO -Repair any open in the wires between the heater control panel and the

power transistor.

20. Turn the ignition switch ON (II).
21. Measure the voltage between body ground and the heater control panel 24P connector terminals No. 7 and No. 8 individually.

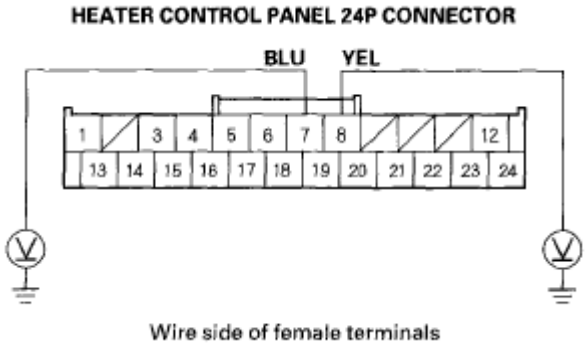


Fig. 20: Measuring Voltage Between Body Ground And Heater Control Panel 24P Connector Terminals No 7 And 8
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there voltage?

YES -Repair short to power in the wires.

NO -Go to step 22.

22. Turn the ignition switch to LOCK (0).
23. Reconnect the heater control panel 24P connector.
24. Test the power transistor (see **POWER TRANSISTOR TEST**).

Is the power transistor OK?

YES -Check for loose wires or poor connections at the heater control panel 24P connector and at the power transistor 4P connector. If the connections are good, substitute a known-good heater control panel, and recheck. If the symptom/indication goes away, replace the original heater control panel.

NO -Replace the power transistor.

25. Turn the ignition switch to LOCK (0).
26. Disconnect the jumper wire.
27. Disconnect the blower motor 2P connector.
28. Turn the ignition switch ON (II).
29. Measure the voltage between the blower motor 2P connector terminal No. 1 and body ground.

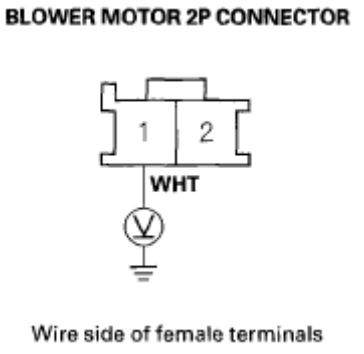


Fig. 21: Measuring Voltage Between Blower Motor 2P Connector Terminal No 1 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES -Replace the blower motor.

NO -Go to step 30.

30. Turn the ignition switch to LOCK (0).
31. Remove the blower motor relay from the under-hood fuse/relay box, and test it (see **POWER RELAY TEST**).

Is the relay OK?

YES -Go to step 32.

NO -Replace the blower motor relay.

32. Measure the voltage between the blower motor relay 4P socket terminal No. 1

and body ground.

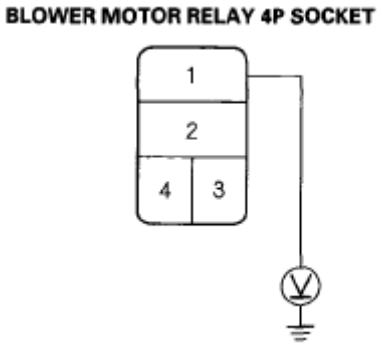


Fig. 22: Measuring Voltage Between Blower Motor Relay 4P Socket Terminal No 1 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES -Go to step 33.

NO -Replace the under-hood fuse/relay box (see **REMOVAL AND INSTALLATION**).

33. Turn the ignition switch ON (II).
34. Measure the voltage between the blower motor relay 4P socket terminal No. 3 and body ground.

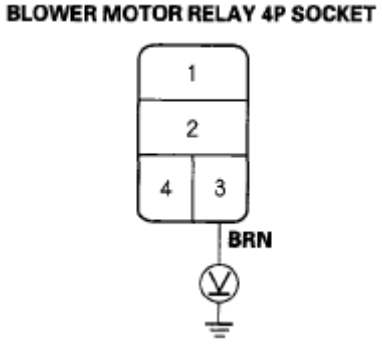


Fig. 23: Measuring Voltage Between Blower Motor Relay 4P Socket Terminal No 3 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES -Go to step 35.

NO -Repair open in the wire between the No. 36 (10 A) fuse in the under-dash fuse/relay box and the blower motor relay.

35. Turn the ignition switch to LOCK (0).
36. Check for continuity between the blower motor relay 4P socket terminal No. 4 and body ground.

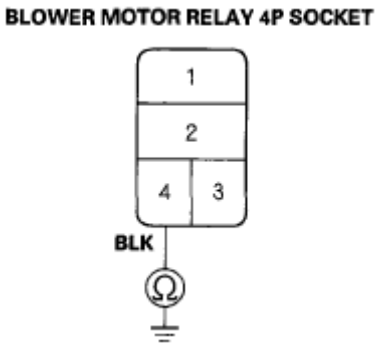


Fig. 24: Checking Continuity Between Blower Motor Relay 4P Socket Terminal No 4 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Repair open in the WHT wire between the blower motor relay and the blower motor.

NO -Check for an open in the wire between the blower motor relay and body ground. If the wire is OK, check for poor ground at G301 (see **CONNECTOR TO HARNESS INDEX**).

DTC INDICATOR 7: HEATER CONTROL PANEL INTERNAL ERROR

NOTE: Check the battery condition (see BATTERY TEST) and the charging system (see CHARGING SYSTEM INDICATOR CIRCUIT TROUBLESHOOTING).

1. Clear the DTC (see **CLEAR THE DTCS**).
2. Turn the ignition switch to LOCK (0), and then ON (II).
3. Do the self-diagnostic with the heater control panel (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION**).
4. Check for DTCs.

   Is DTC 7 indicated?

   YES -The heater control panel is faulty, replace the heater control panel (see **HEATER CONTROL PANEL REMOVAL AND INSTALLATION**).

   NO -Intermittent failure, the heater control panel is OK at this time.

RECIRCULATION CONTROL MOTOR CIRCUIT TROUBLESHOOTING

1. Check the No. 36 (10 A) fuse in the under-dash fuse/relay box.

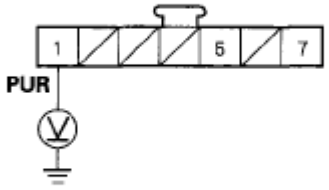
   Is the fuse OK?

   YES -Go to step 2.

   NO -Replace the fuse, and recheck. If the fuse blows again, check for a short in the No. 36 (10 A) fuse circuit.

2. Disconnect the recirculation control motor 7P connector.
3. Turn the ignition switch ON (II).
4. Measure the voltage between the recirculation control motor 7P connector terminal No. 1 and body ground.

RECIRCULATION CONTROL MOTOR 7P CONNECTOR



Wire side of female terminals

Fig. 25: Measuring Voltage Between Recirculation Control Motor 7P Connector Terminal No 1 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES -Go to step 5.

NO -Repair open in the wire between the No. 36 (10 A) fuse in the under-dash fuse/relay box and the recirculation control motor.

5. Turn the ignition switch to LOCK (0).
6. Test the recirculation control motor (see **RECIRCULATION CONTROL MOTOR TEST**).

Is the recirculation control motor OK?

YES -Go to step 7.

NO -Replace the recirculation control motor (see **RECIRCULATION CONTROL MOTOR TEST**), or repair the recirculation control linkage or door.

7. Disconnect the heater control panel 24P connector.
8. Check for continuity between body ground and the heater control panel 24P connector terminals No. 16 and No. 17 individually.

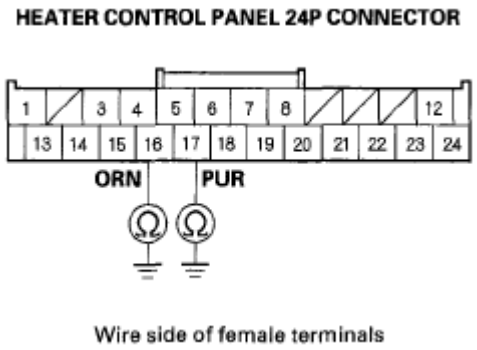


Fig. 26: Checking Continuity Between Body Ground And Heater Control Panel 24P Connector Terminals No 16 And 17

Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Repair any short to body ground in the wires between the heater control panel and the recirculation control motor.

NO -Go to step 9.

9. Turn the ignition switch ON (II), and check the same terminals for voltage to body ground.

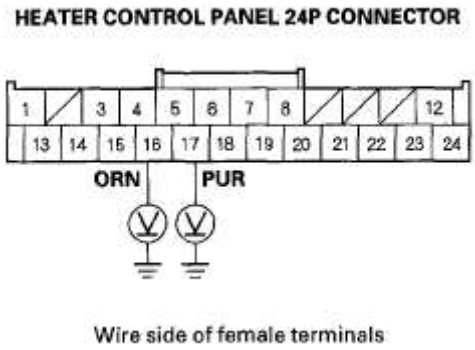


Fig. 27: Checking Voltage Between Body Ground And Heater Control Panel 24P Connector Terminals No 16 And 17
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there any voltage?

YES -Repair any short to power in the wires between the heater control panel and the recirculation control motor. This short may also damage the heater control panel. Repair the short to power before replacing the heater control panel.

NO -Go to step 10.

10. Turn the ignition switch to LOCK (0).
11. Check for continuity between the following terminals of the heater control panel 24P connector and the recirculation control motor IP connector.

CONTINUITY CHECK INDEX

24P	7P
16	7
17	5

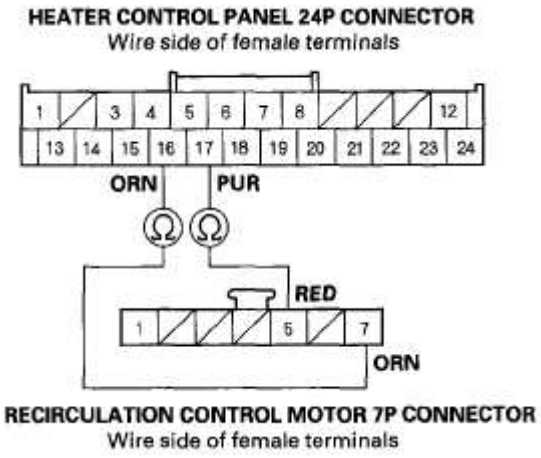


Fig. 28: Checking Continuity Between Heater Control Panel 24P And Recirculation Control Motor IP Connector Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Check for loose wires or poor connections at the heater control panel 24P connector and at the recirculation control motor 7P connector. If the connections are good, substitute a known-good heater control panel, and recheck. If the symptom/indication goes away, replace the original heater control panel.

NO -Repair any open in the wires between the heater control panel and the recirculation control motor.

HEATER CONTROL POWER AND GROUND CIRCUIT TROUBLESHOOTING

1. Check the No. 36 (10 A) fuse in the under-dash fuse/relay box.

   Is the fuse OK?

   YES -Go to step 2.

NO -Replace the fuse, and recheck. If the fuse blows again, check for a short in the No. 36 (10 A) fuse circuit.

2. Disconnect the heater control panel 24P connector.
3. Turn the ignition switch ON (II).
4. Measure the voltage between the heater control panel 24P connector terminal No. 23 and body ground.

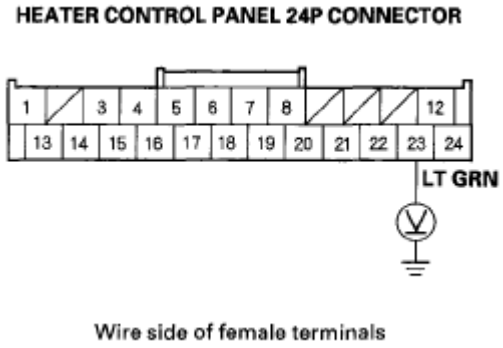


Fig. 29: Measuring Voltage Between Heater Control Panel 24P Connector Terminal No 23 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there battery voltage?

YES -Go to step 5.

NO -Repair open in the wire between the No. 36 (10 A) fuse in the under-dash fuse/relay box and the heater control panel.

5. Turn the ignition switch to LOCK (0).
6. Check for continuity between the heater control panel 24P connector terminal No. 21 and body ground.

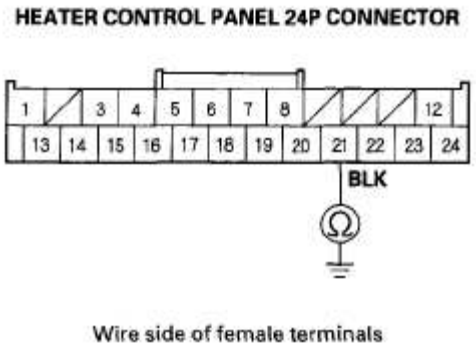


Fig. 30: Checking Continuity Between Heater Control Panel 24P Connector Terminal No 21 And Body Ground
Courtesy of AMERICAN HONDA MOTOR CO., INC.

Is there continuity?

YES -Check for loose wires or poor connections at the heater control panel 24P connector. If the connections are good, substitute a known-good heater control panel, and recheck.

NO -Check for an open in the wire between the heater control panel and body ground. If the wire is OK, check for poor ground at G504 (see **CONNECTOR TO HARNESS INDEX**).

POWER TRANSISTOR TEST

1. Remove the passenger's dashboard undercover (see **PASSENGER's DASHBOARD UNDERCOVER REMOVAL/INSTALLATION**).
2. Disconnect the 4P connector from the power transistor.
3. Measure the resistance between the No. 3 and No. 4 terminals of the power transistor. It should be about 1.5 kohms.
   - If the resistance is within the specifications, go to step 4.
   - If the resistance is not within the specifications, replace the power transistor.

NOTE: Also check the blower motor. Power transistor failure can be caused by a defective blower motor.

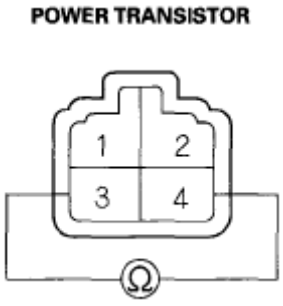


Fig. 31: Measuring Resistance Between No 3 And No 4 Terminals Of Power Transistor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Carefully release the lock tab on the No. 1 terminal (YEL) (A) in the 4P connector, then remove the terminal and insulate it from body ground.

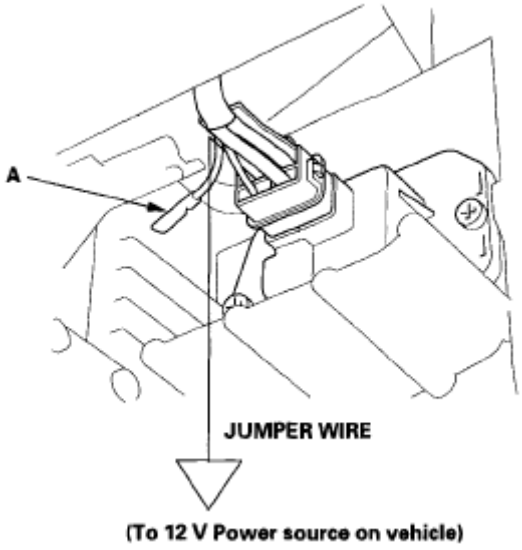


Fig. 32: Identifying 4P Connector Terminal No. 1
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Reconnect the 4P connector to the power transistor.
6. Make sure the YEL wire is completely isolated, then supply 12 V to the No. 1 cavity with a jumper wire.
7. Turn the ignition switch ON (II), and check that the blower motor runs.
   - If the blower motor does not run, replace the power transistor.
   - If the blower motor runs, the power transistor is OK.

AIR MIX CONTROL MOTOR TEST

NOTE: Before testing, check for HVAC DTCs (see HOW TO USE THE SELF-DIAGNOSTIC FUNCTION).

1. Disconnect the 7P connector from the air mix control motor.

   NOTE: Incorrectly applying power and ground to the air mix control motor will damage it. Follow the instructions carefully.

2. Connect battery power to the No. 1 terminal of the air mix control motor, and ground the No. 2 terminal; the air mix control motor should run, and stop at Max Hot. If it doesn't, reverse the connections; the air mix control motor should run, and stop at Max Cool. When the air mix control motor stops running, disconnect battery power immediately.

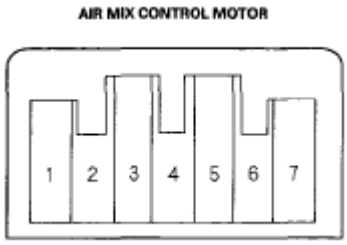


Fig. 33: Identifying Air Mix Control Motor Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. If the air mix control motor did not run in step 2, remove it, then check the air mix control linkage and door for smooth movement.
   - If the linkage and door move smoothly, replace the air mix control motor (see **AIR MIX CONTROL MOTOR TEST**).
   - If the linkage or door sticks or binds, repair them as needed.
   - If the air mix control motor runs smoothly, go to step 4.
4. Measure the resistance between the No. 5 and No. 7 terminals. It should be between 4.2 to 7.8 kohms.
5. Reconnect the air mix control motor 7P connector, then turn the ignition switch

ON (II).

6. Using the backprobe set. Measure the voltage between the No. 3 and No. 7 terminals.

   Max Cool: about 0.5 V

   Max Hot: about 4.5 V

7. If either the resistance or voltage readings are not as specified, replace the air mix control motor (see **AIR MIX CONTROL MOTOR TEST**).

AIR MIX CONTROL MOTOR REPLACEMENT

1. Remove the driver's dashboard undercover (see **DRIVER's DASHBOARD UNDERCOVER REMOVAL/INSTALLATION**).
2. Disconnect the 7P connector (A) from the air mix control motor (B). Remove the self-tapping screws and the air mix control motor from the heater unit.

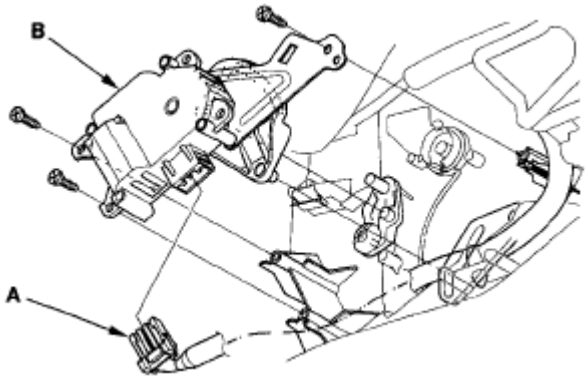


Fig. 34: Identifying 7P Connector And Air Mix Control Motor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the motor in the reverse order of removal. Make sure the pin on the motor is properly engaged with the linkage. After installation, make sure the motor runs smoothly.

MODE CONTROL MOTOR TEST

NOTE: Before testing, check for HVAC DTCs (see HOW TO USE

THE SELF-DIAGNOSTIC FUNCTION).

1. Disconnect the 7P connector from the mode control motor.

NOTE: Incorrectly applying power and ground to the mode control motor will damage it. Follow the instructions carefully.

2. Connect battery power to the No. 1 terminal of the mode control motor, and ground the No. 2 terminal; the mode control motor should run smoothly, and stop at Vent. If it doesn't, reverse the connections; the mode control motor should run smoothly, and stop at Defrost. When the mode control motor stops running, disconnect battery power immediately.

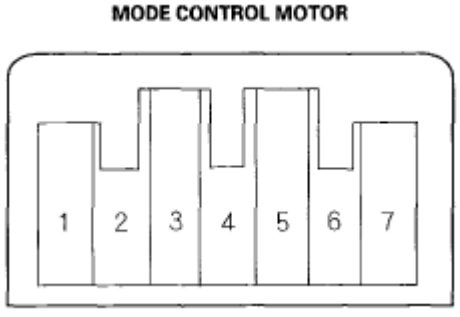


Fig. 35: Identifying Mode Control Motor Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. If the mode control motor did not run in step 2, remove it, then check the mode control linkage and doors for smooth movement.
   - If the linkage and doors move smoothly, replace the mode control motor (see **MODE CONTROL MOTOR TEST**).
   - If the linkage or doors stick or bind, repair them as needed.
   - If the mode control motor runs smoothly, go to step 4.
4. Use a digital multimeter with an output of 1 mA or less at the 20 k ohms range. With the mode control motor running as in step 2, check for continuity between the No. 3, 4, 5, and 6 terminals and the No. 7 terminal individually. There should be continuity for a moment at each terminal as the motor moves past the switch's terminal.

5. If there is no continuity for a moment at each terminal, replace the mode control motor (see **MODE CONTROL MOTOR TEST**).

MODE CONTROL MOTOR REPLACEMENT

1. Remove the glove box (see **PASSENGER's DASHBOARD UNDERCOVER REMOVAL/INSTALLATION**).
2. Remove the wire harness clip (A), the self-tapping screws, and the passenger's heater duct (B).

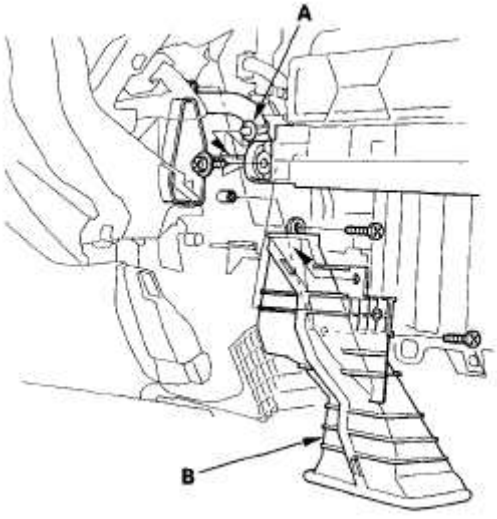


Fig. 36: Identifying Wire Harness Clip And Passenger's Heater Duct
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Disconnect the 7P connector (A) from the mode control motor (B). Remove the self-tapping screws and the mode control motor from the heater unit.

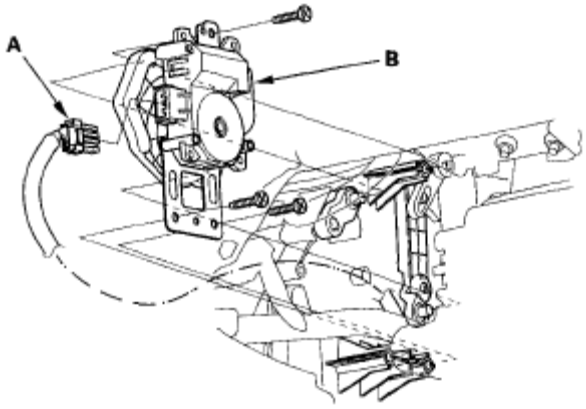


Fig. 37: Identifying 7P Connector And Mode Control Motor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the motor in the reverse order of removal. Make sure the pin on the motor is properly engaged with the linkage. After installation, make sure the motor runs smoothly.

RECIRCULATION CONTROL MOTOR TEST

NOTE: Before testing, check for HVAC DTCs (see HOW TO USE THE SELF-DIAGNOSTIC FUNCTION).

1. Disconnect the 7P connector from the recirculation control motor.

NOTE: Incorrectly applying power and ground to the recirculation control motor will damage it. Follow the instructions carefully.

2. Connect battery power to the No. 1 terminal of the recirculation control motor, and ground the No. 5 and No. 7 terminals; the recirculation control motor should run smoothly. To avoid damaging the recirculation control motor, do not reverse power and ground. Disconnect the No. 5 or No. 7 terminals from ground; the recirculation control motor should stop at Fresh (when the No. 5 terminal is disconnected) or Recirculate (when the No. 7 terminal is disconnected). Don't cycle the recirculation control motor for a long time.

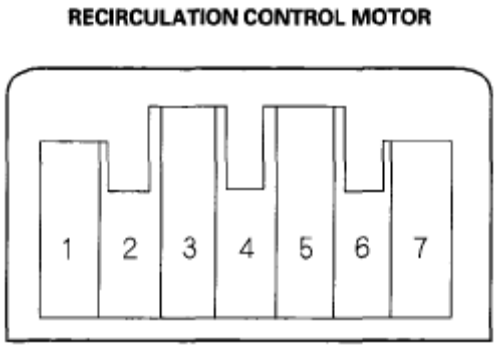


Fig. 38: Identifying Recirculation Control Motor Terminals
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. If the recirculation control motor did not run in step 2, remove it, then check the recirculation control linkage and door for smooth movement.
   - If the linkage and door move smoothly, replace the recirculation control motor (see **RECIRCULATION CONTROL MOTOR TEST**).
   - If the linkage or door stick or bind, repair them as needed.

RECIRCULATION CONTROL MOTOR REPLACEMENT

1. Remove the glove box (see **PASSENGER's DASHBOARD UNDERCOVER REMOVAL/INSTALLATION**) and the passenger's kick panel, 2-door (see **TRIM REMOVAL/INSTALLATION - DOOR AREAS**), 4-door (see **FRONT DOOR SILL AREA - 4-DOOR**).
2. Disconnect the 7P connector (A) from the recirculation control motor (B). Remove the self-tapping screws and the recirculation control motor from the blower unit.

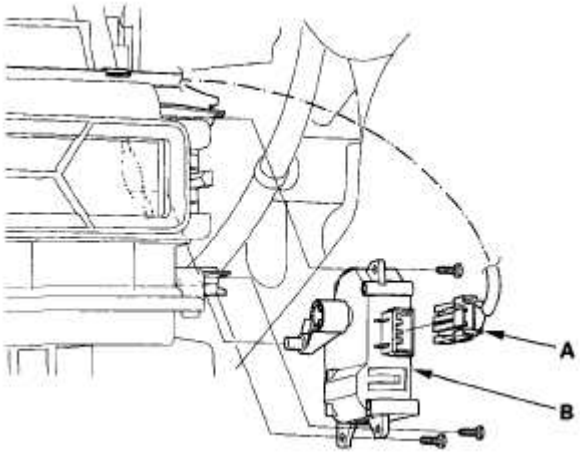


Fig. 39: Identifying 7P Connector And Recirculation Control Motor
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the motor in the reverse order of removal. Make sure the pin on the motor is properly engaged with the linkage. After installation, make sure the motor runs smoothly.

HEATER CONTROL PANEL REMOVAL AND INSTALLATION

1. Remove the center panel (see **AUDIO UNIT REMOVAL/INSTALLATION**).
2. Remove the dials (A), the self-tapping screws, and the heater control panel (B).

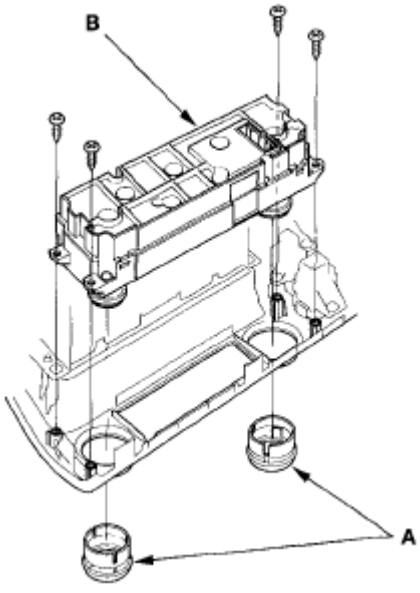


Fig. 40: Identifying Dials And Heater Control Panel
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Install the control panel in the reverse order of removal. After installation, operate the various functions to make sure they work properly.
4. Run the self-diagnosis function to confirm that there are no problems in the system (see **HOW TO USE THE SELF-DIAGNOSTIC FUNCTION**).

DUST AND POLLEN FILTER REPLACEMENT

1. Open the glove box. Remove the glove box stop on each side, then let the glove box hang down (see **PASSENGER'S DASHBOARD UNDERCOVER REMOVAL/INSTALLATION**).
2. Remove the dust and pollen filter assembly (A) from the evaporator.

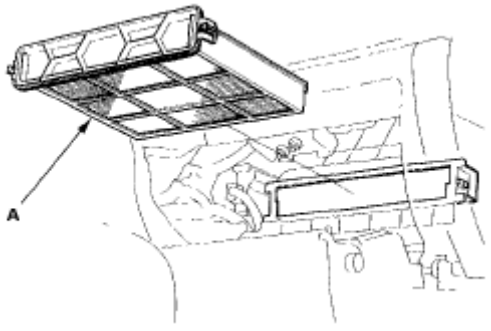


Fig. 41: Identifying Dust And Pollen Filter Assembly
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the filter (A) from the housing (B), and replace the filter.

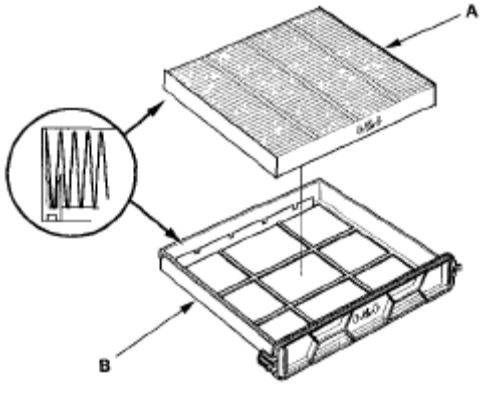


Fig. 42: Identifying Filter And Housing
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Install the filter in the reverse order of removal. Make sure that there is no air leaking out of the evaporator.

BLOWER UNIT REMOVAL AND INSTALLATION

1. Remove the glove box (see **PASSENGER'S DASHBOARD UNDERCOVER REMOVAL/INSTALLATION**).
2. Cut the plastic cross brace (A) in the glove box opening with diagonal cutters in the area shown, and discard it.

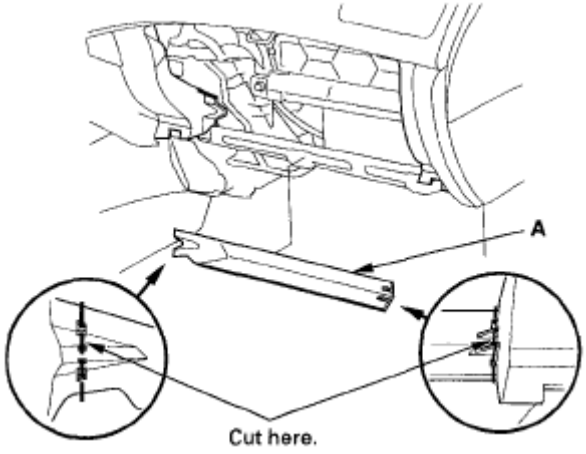


Fig. 43: Identifying Plastic Cross Brace
Courtesy of AMERICAN HONDA MOTOR CO., INC.

3. Remove the bolts and the glove box frame (A).

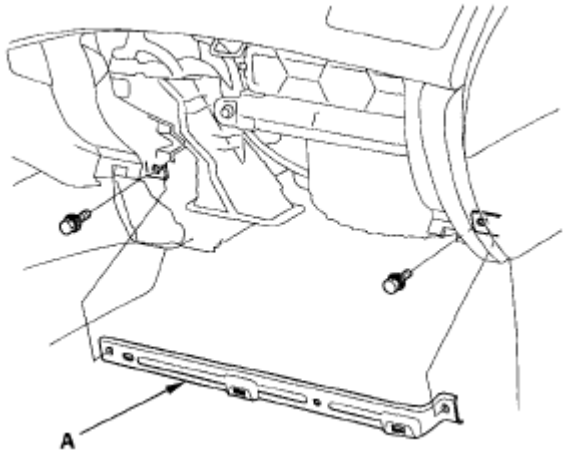


Fig. 44: Identifying Glove Box Frame
Courtesy of AMERICAN HONDA MOTOR CO., INC.

4. Remove the wire harness clip (A), the self-tapping screws, and the passenger's heater duct (B).

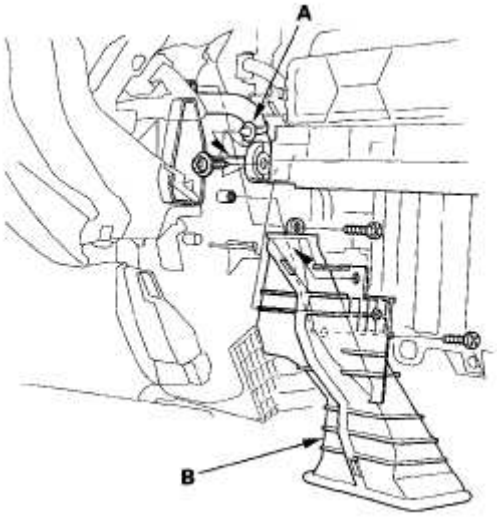


Fig. 45: Identifying Wire Harness Clip And Passenger's Heater Duct
Courtesy of AMERICAN HONDA MOTOR CO., INC.

5. Disconnect the connector (A) from the blower motor. Remove the wire harness clip (B).

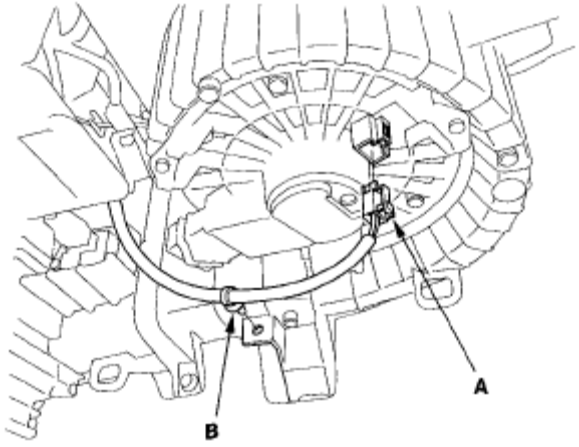


Fig. 46: Identifying Connector And Wire Harness Clip
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Disconnect the connector (A) from the recirculation control motor. Remove the self-tapping screws, the bolt, the mounting nuts, and the blower unit (B).

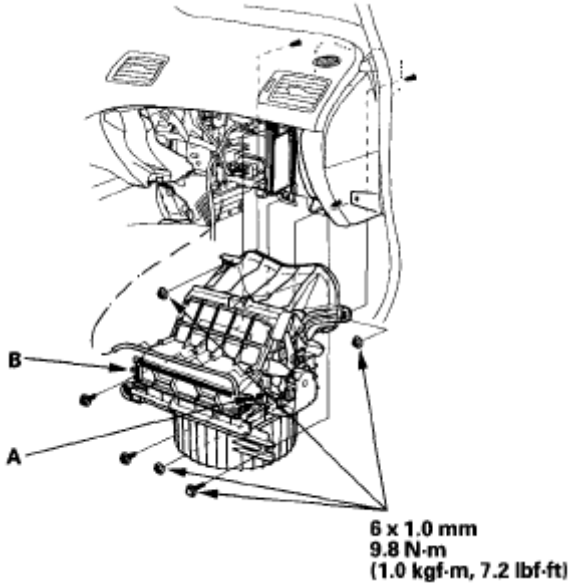


Fig. 47: Identifying Connector And Blower Unit (With Torque Specifications)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Install the unit in the reverse order of removal. Make sure that there is no air leakage.

BLOWER UNIT COMPONENT REPLACEMENT

Note these items when overhauling the blower unit:

- The recirculation control motor (A), blower motor (B) and the dust and pollen filter (C) can be replaced without removing the blower unit.
- Before reassembly, make sure that the recirculation control linkage and door move smoothly without binding.
- After reassembly, make sure the recirculation control motor runs smoothly (see **RECIRCULATION CONTROL MOTOR TEST**).

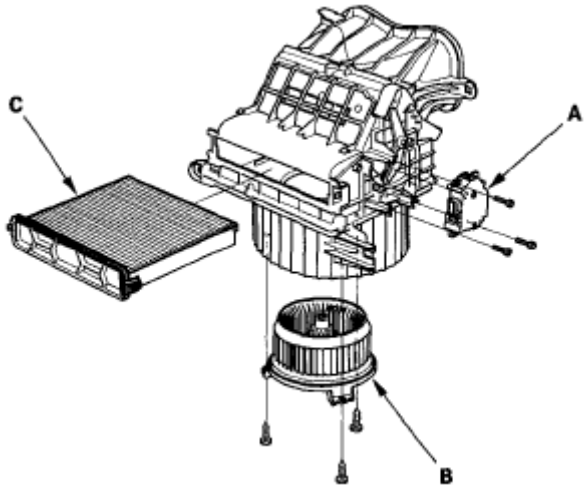


Fig. 48: Identifying Recirculation Control Motor, Blower Motor And Dust And Pollen Filter
Courtesy of AMERICAN HONDA MOTOR CO., INC.

HEATER UNIT/CORE REPLACEMENT

SRS components are located in this area. Review the SRS component locations (see **COMPONENT LOCATION INDEX**) and the precautions and procedures (see **PRECAUTIONS AND PROCEDURES**) in the SRS before doing repairs or service.

1. Make sure you have the anti-theft code for the audio or navigation system, then write down the audio presets.
2. Make sure the ignition is OFF, then disconnect the negative cable from the

battery.

3. Remove the air cleaner housing assembly (see **THROTTLE BODY CLEANING**).
4. When the engine is cool, drain the engine coolant from the radiator (see **COOLANT REPLACEMENT**).
5. From under the hood, slide the hose clamps (A) back. Disconnect the inlet heater hose (B) and the outlet heater hose (C) from the heater unit. Note the orientation of the hoses.

   Engine coolant will run out when the hoses are disconnected; drain it into a clean drip pan. Be sure not to let coolant spill on the electrical parts or the painted surfaces. If any coolant spills, rinse it off immediately.

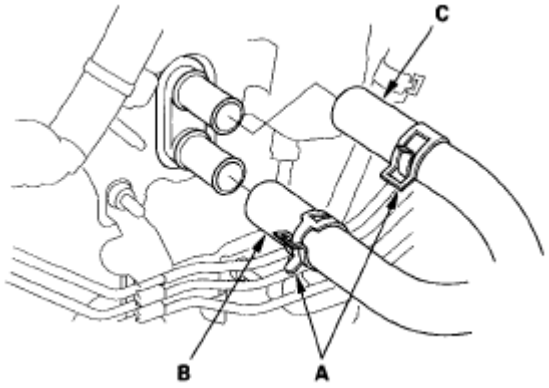


Fig. 49: Identifying Hose Clamps, Inlet Heater Hose And Outlet Heater Hose
Courtesy of AMERICAN HONDA MOTOR CO., INC.

6. Remove the mounting nut from the heater unit. Take care not to damage or bend the fuel lines or brake lines, etc.

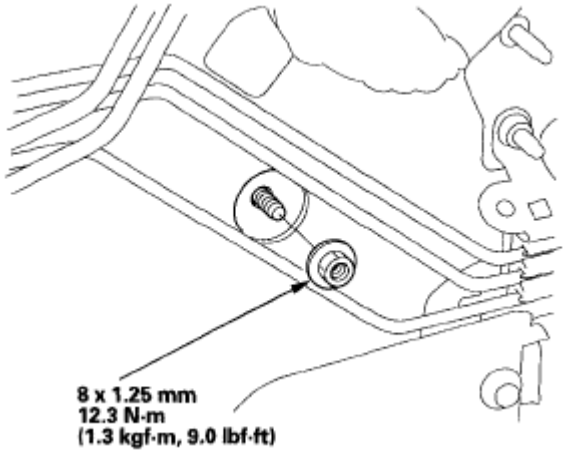


Fig. 50: Identifying Heater Unit Mounting Nut (With Torque Specifications)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

7. Remove the dashboard (see **SIDE DEFOGGER VENT TRIM REMOVAL/INSTALLATION**).
8. Disconnect the connector (A) from the blower motor. Remove the wire harness clip (B).

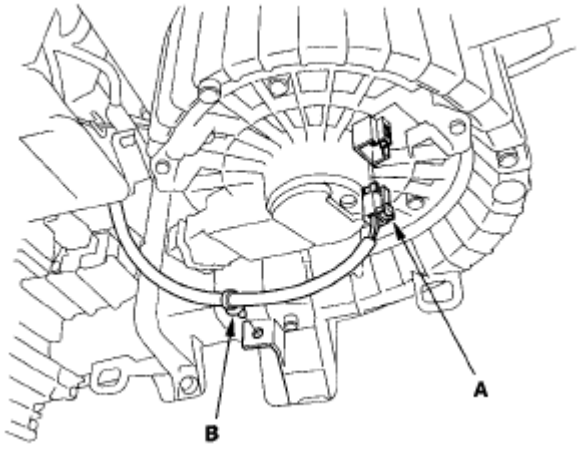


Fig. 51: Identifying Blower Motor Connector And Wire Harness Clip
Courtesy of AMERICAN HONDA MOTOR CO., INC.

9. Disconnect the connector (A) from the recirculation control motor.

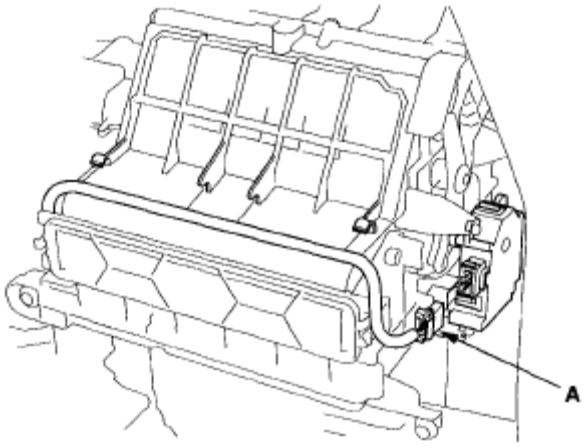


Fig. 52: Identifying Recirculation Control Motor Connector
Courtesy of AMERICAN HONDA MOTOR CO., INC.

10. Disconnect the connectors (A) from the mode control motor, the evaporator temperature sensor, and the power transistor. Remove the wire harness clip(B).

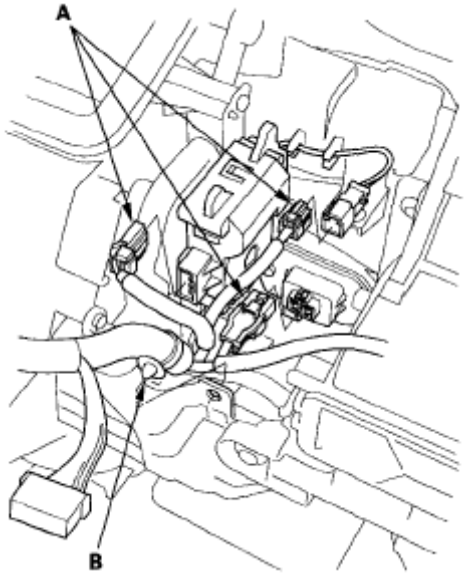


Fig. 53: Identifying Connectors And Wire Harness Clip
Courtesy of AMERICAN HONDA MOTOR CO., INC.

11. Disconnect the connectors (A) from the air mix control motor and A/C wire harness. Remove the connector clip (B), the wire harness clips (C), and the wire harness (D).

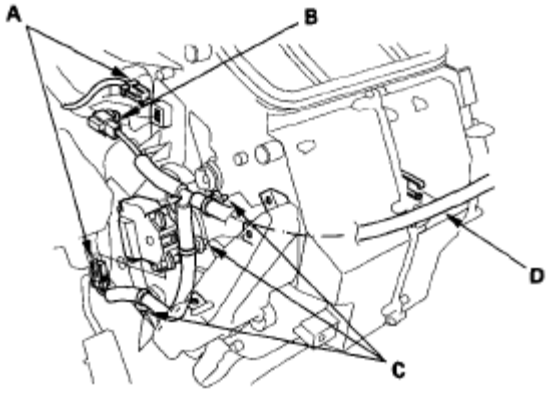


Fig. 54: Identifying Air Mix Control Motor Connector, Connector Clip And Wire Harness
Courtesy of AMERICAN HONDA MOTOR CO., INC.

12. Remove the mounting bolt, mounting nuts, and blower-heater unit (A).

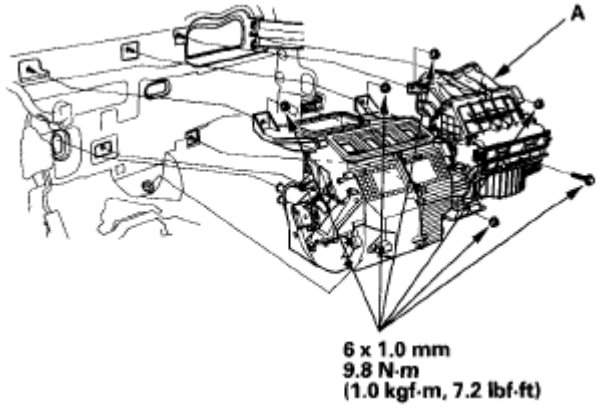


Fig. 55: Identifying Blower-Heater Unit Mounting Bolts (With Torque Specifications)
Courtesy of AMERICAN HONDA MOTOR CO., INC.

13. Remove the self-tapping screws, the heater core cover (A), the grommet (B), and carefully pull out the heater core (C).

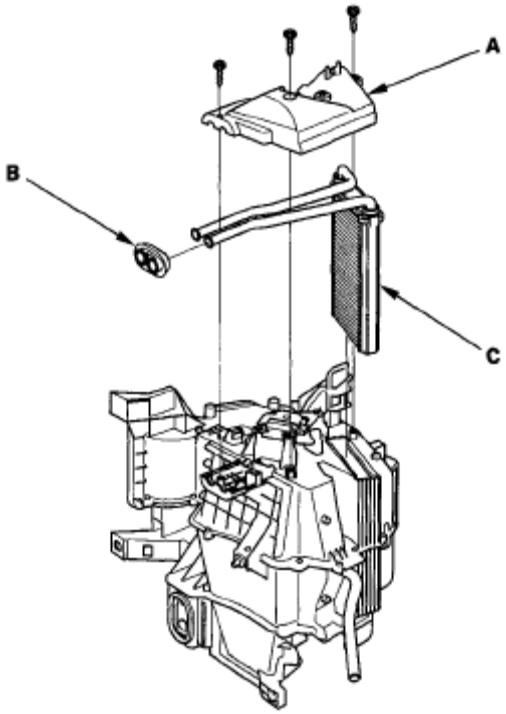


Fig. 56: Identifying Heater Core Cover, Grommet And Heater Core
Courtesy of AMERICAN HONDA MOTOR CO., INC.

14. Install the heater core in the reverse order of removal.
15. Install the heater unit in the reverse order of removal, and note these items:
    - Do not interchange the inlet and outlet heater hoses, and install the hose clamps securely.
    - Refill the cooling system with engine coolant (see **COOLANT REPLACEMENT**).
    - Make sure that there is no coolant leakage.
    - Make sure that there is no air leakage.
    - Enter the anti-theft code for the audio or navigation system, then enter the audio presets.
    - Set the clock.